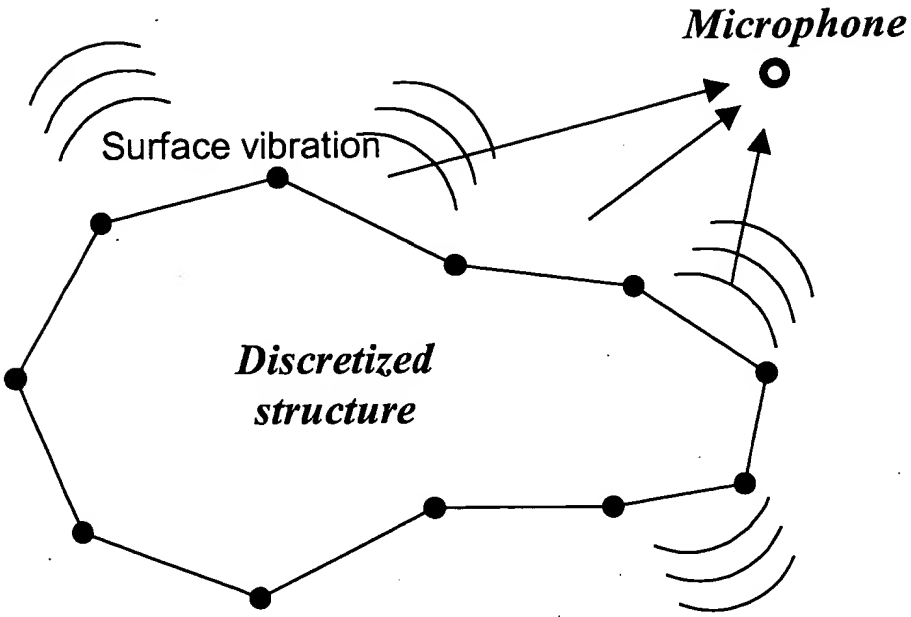

Figure 1

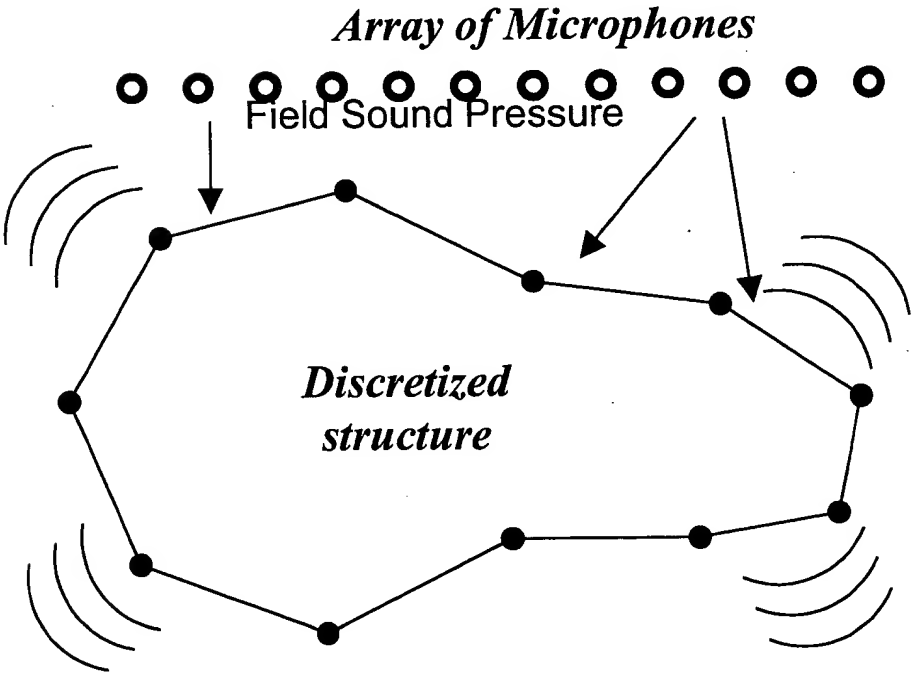

Figure 2

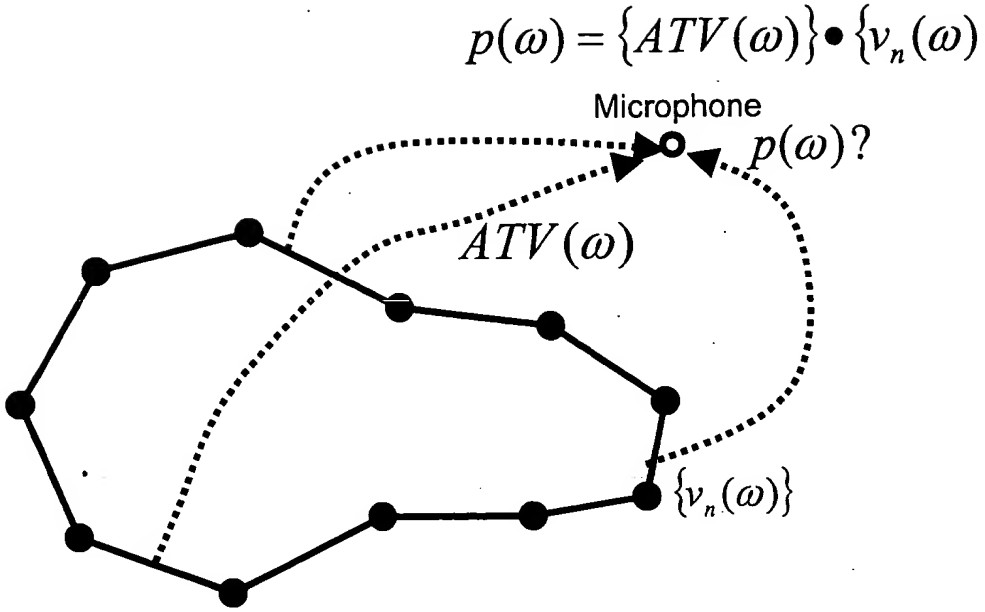
$p(\omega) = \{ATV(\omega)\} \bullet \{v_n(\omega)$
Microphone
$p(\omega)?$
$ATV(\omega)$
$\{v_n(\omega)\}$

Figure 3

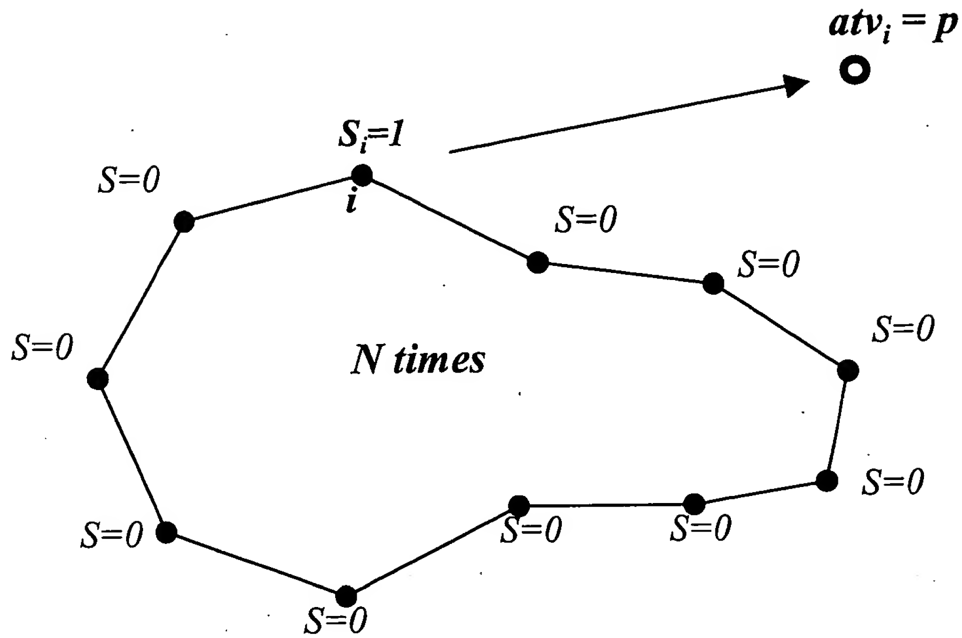

Figure 4

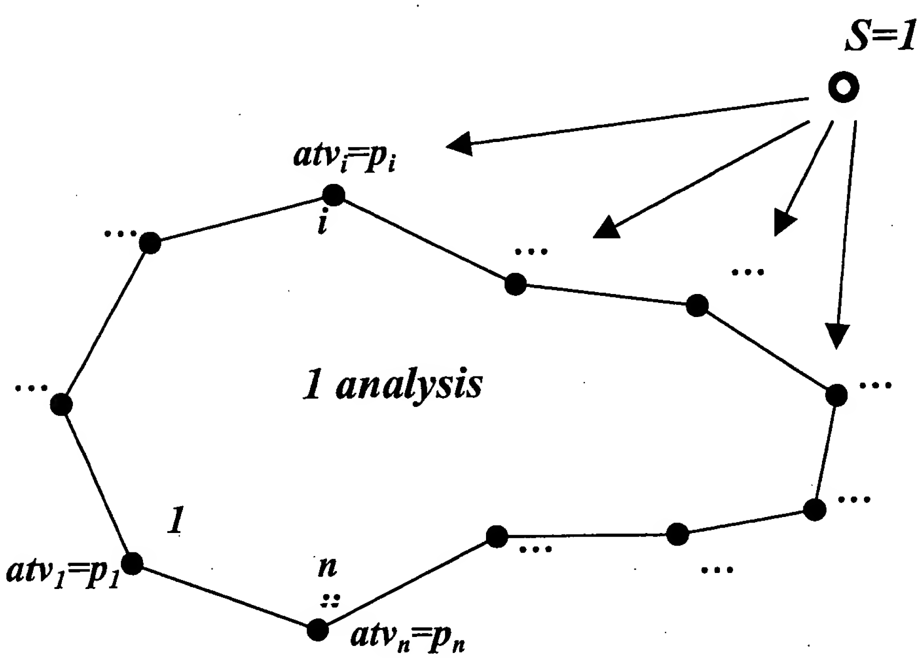

Figure 5

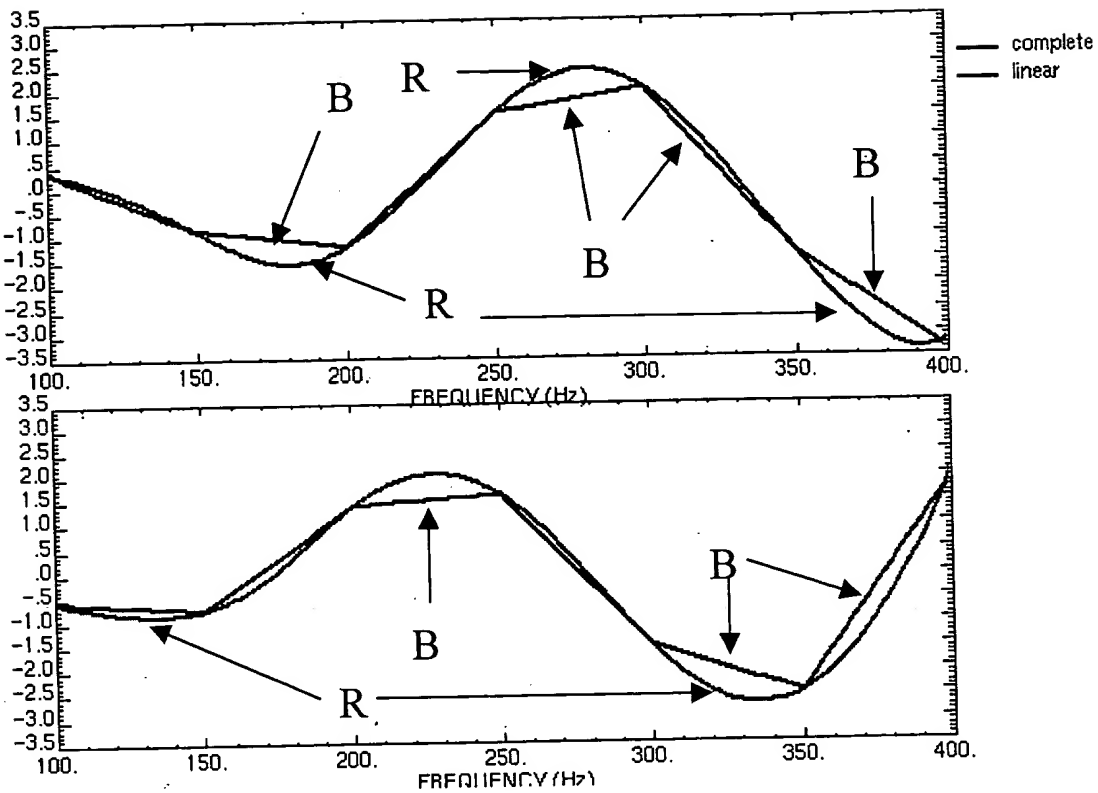

Figure 6 : linear interpolation (B) of an Acoustic Transfer Vector (R).

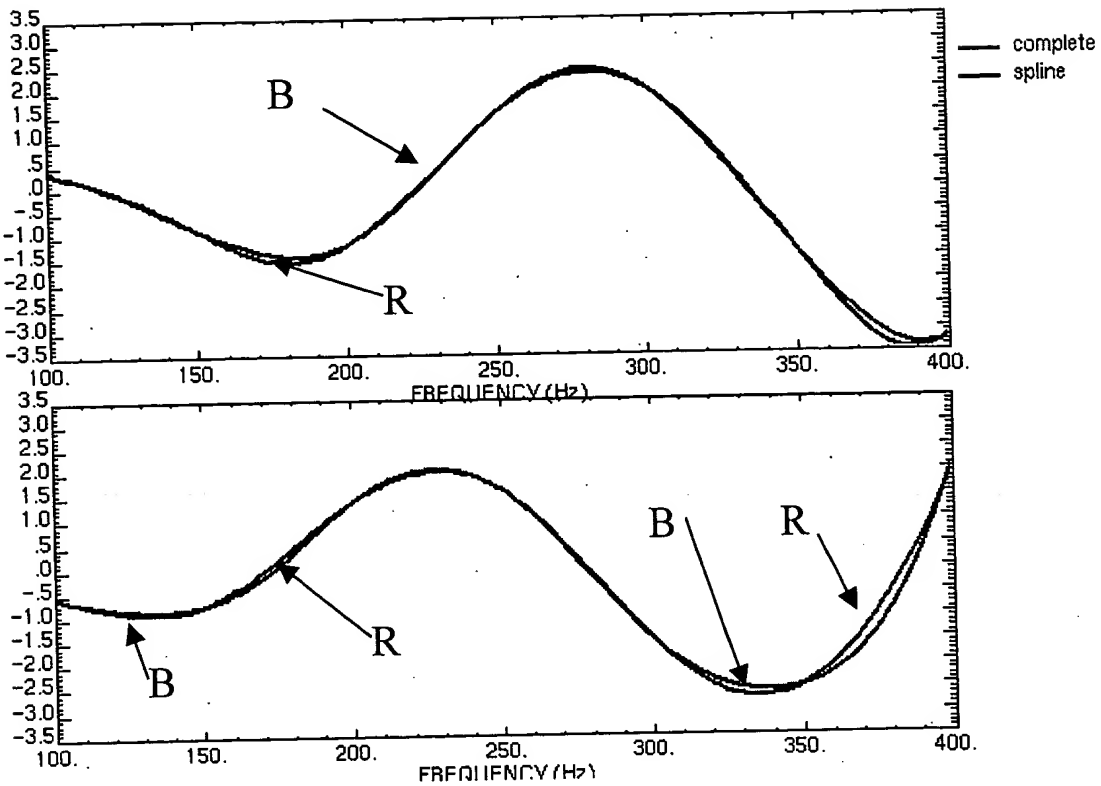

Figure 7: Spline interpolation (B) of an Acoustic Transfer Vector (R).

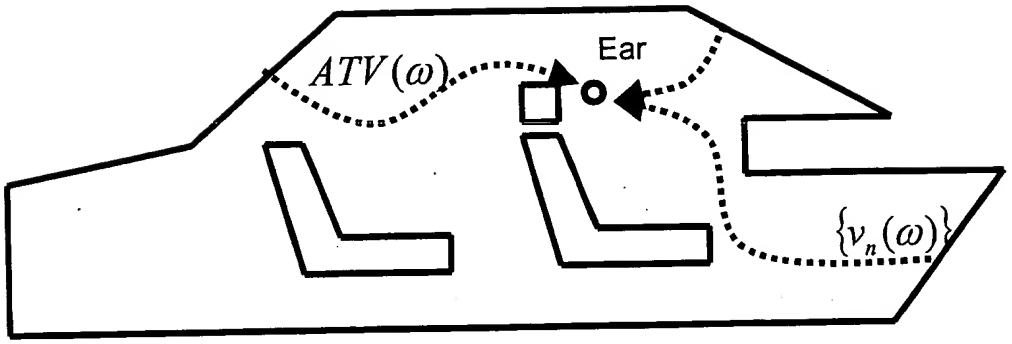

Figure 8

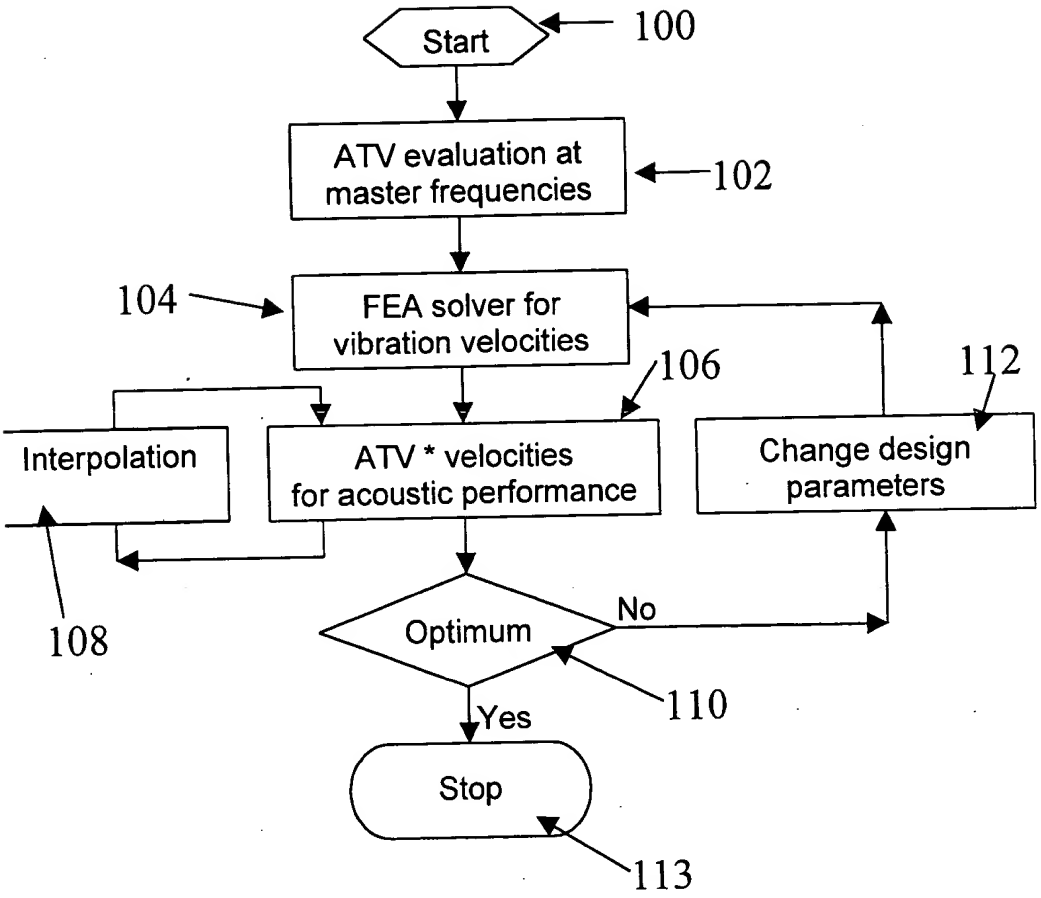
Start
100
ATV evaluation at master frequencies
102
104
FEA solver for vibration velocities
106
112
Interpolation
ATV * velocities for acoustic performance
Change design parameters
108
Optimum
No
110
Yes
Stop
113

Figure 9a

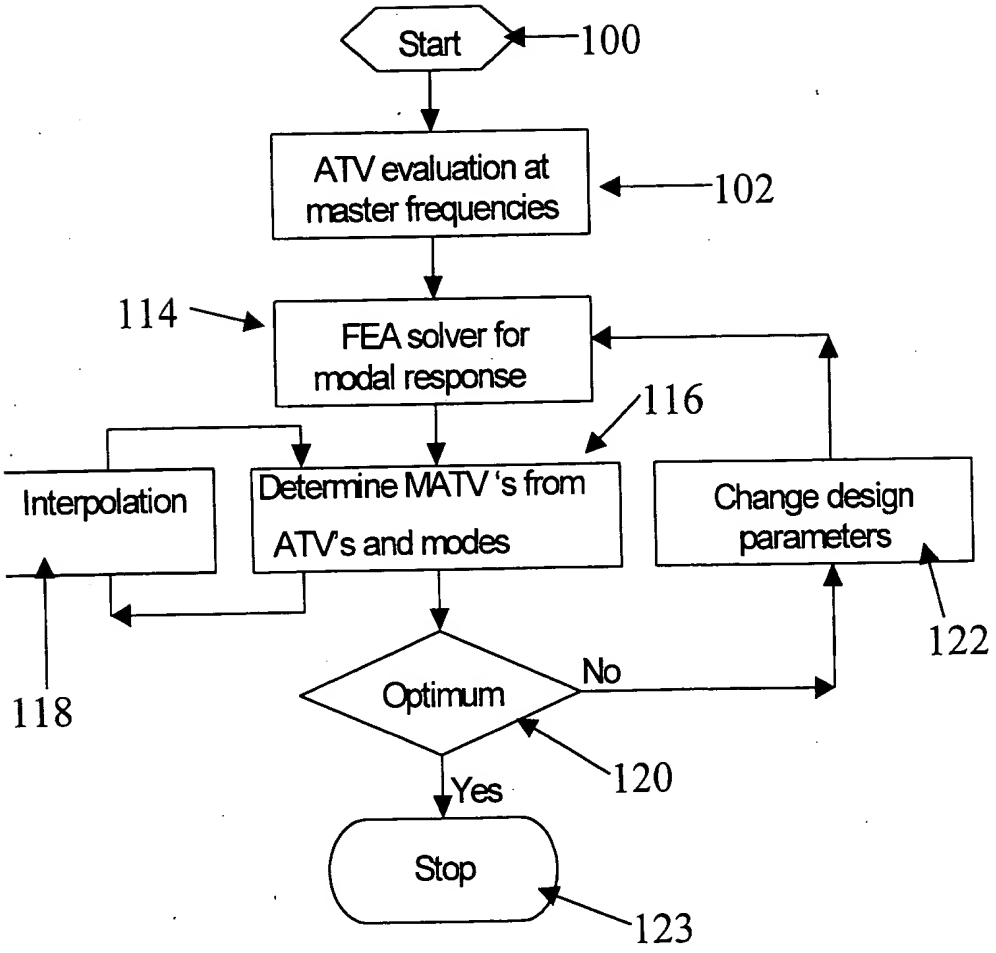
Start
100
ATV evaluation at master frequencies
102
114
FEA solver for modal response
116
Interpolation
Determine MATV 's from ATV's and modes
Change design parameters
122
118
Optimum
No
120
Yes
Stop
123

Figure 9b

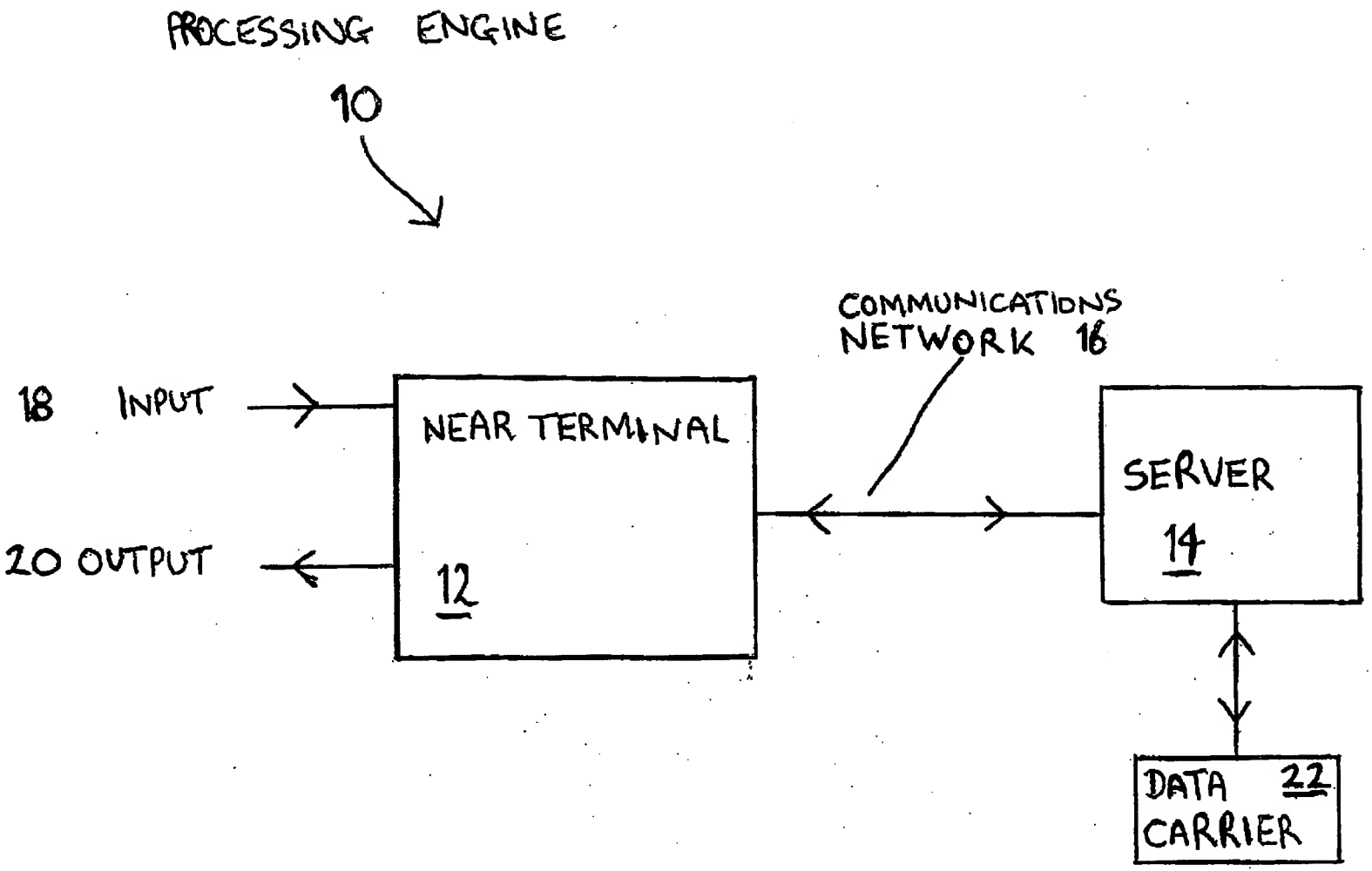

Fig. 10

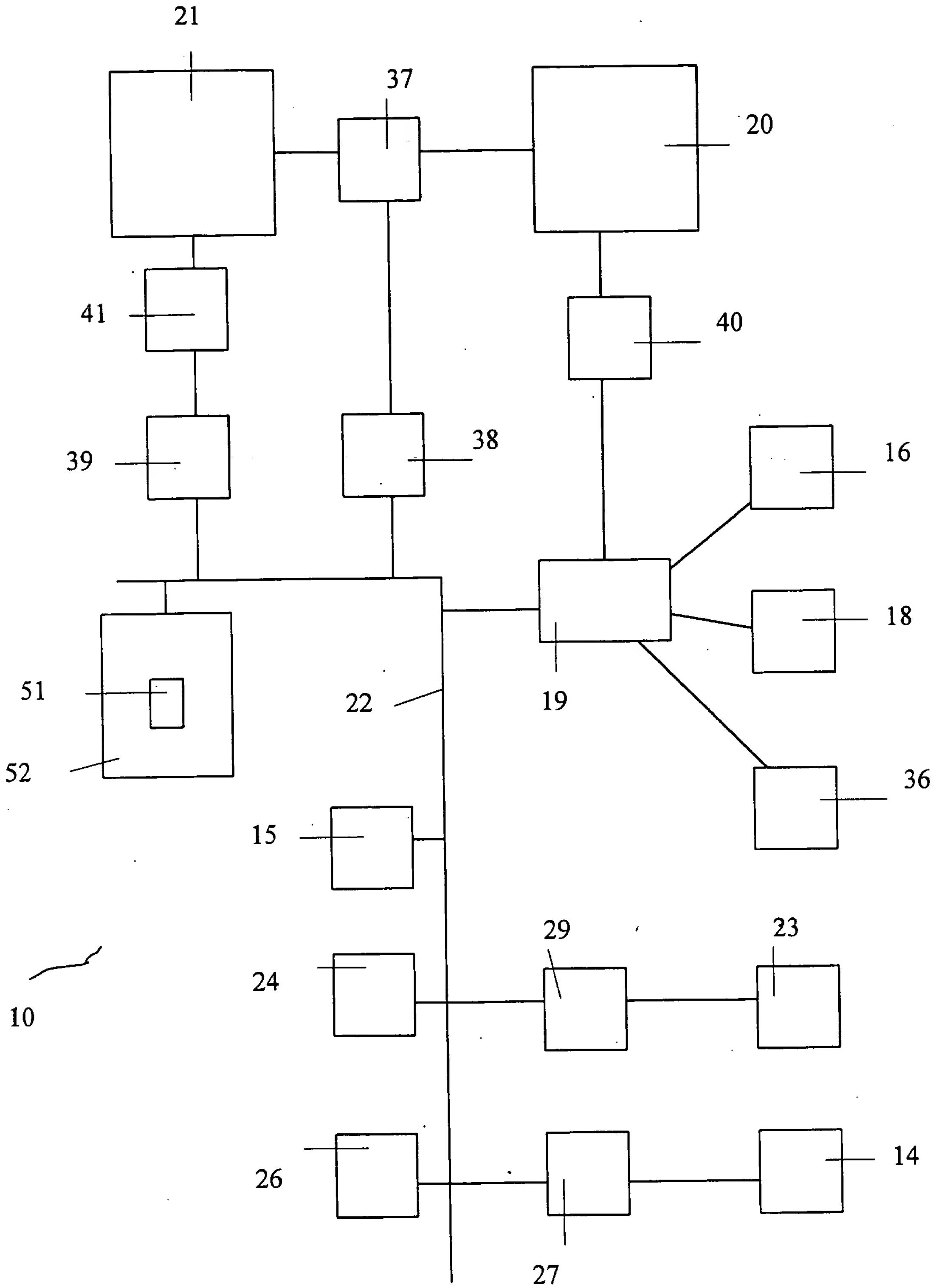

Fig. 11